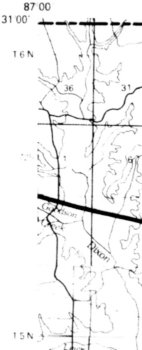
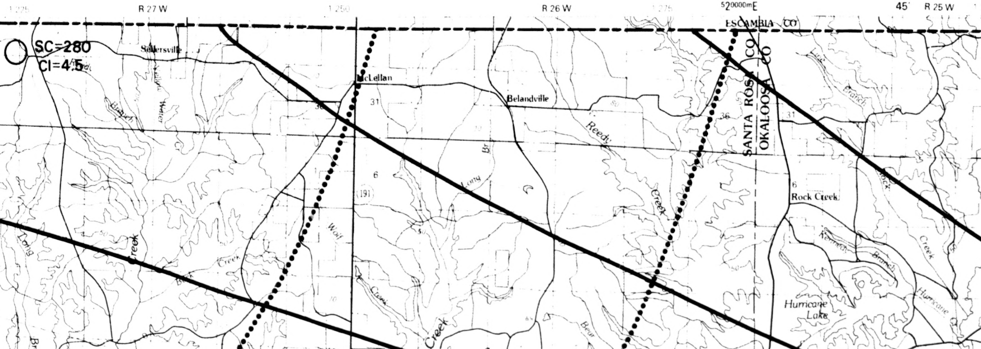
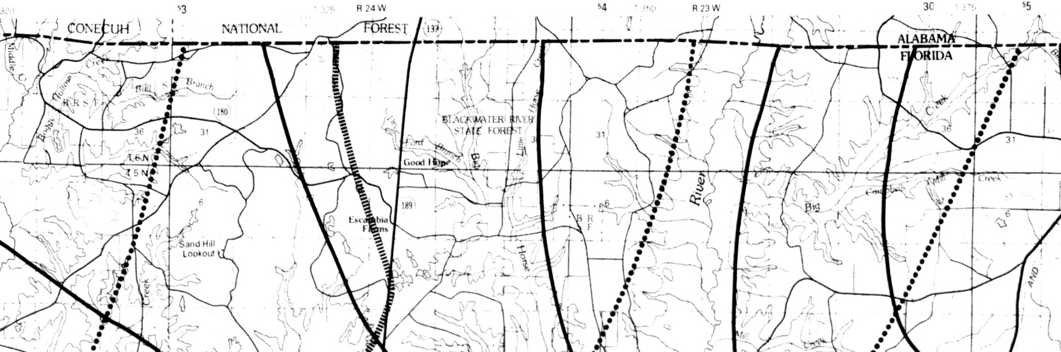
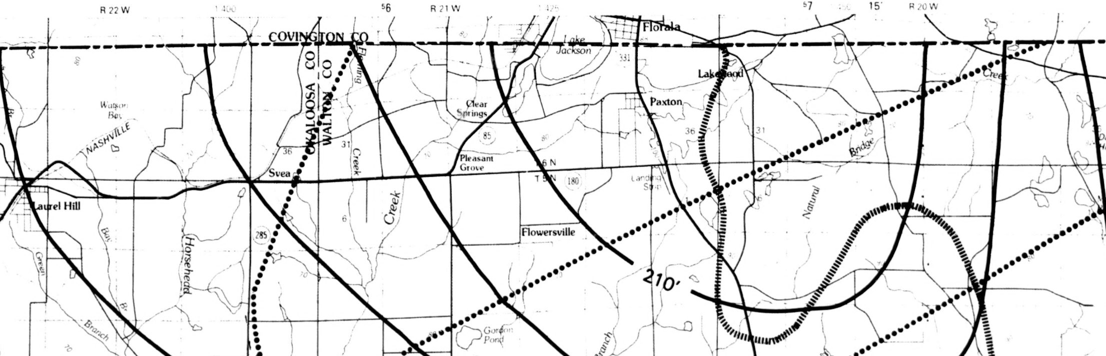
MICROCOPY RESOLUTION TEST CHART
NBS 1010a
(ANSI and ISO TEST CHART No. 2)
1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6


87°00'
31°00'
T6N
36
31
1
6
Creek
Dixon
T5N


R 27 W
1 250
R 26 W
520000mE
45'
R 25 W
SC=280
CI=4.5
Sellersville
McLellan
31
36
Belandville
ESCAMBIA CO
SANTA ROSA CO
OKALOOSA CO
36
31
Reedy
Creek
6
(191)
Long
Br
Wolf
Creek
Long
Creek
Creek
Bear
Rock Creek
6
Branch
Creek
Hurricane
Lake
Hurricane Cr
Weller
Branch

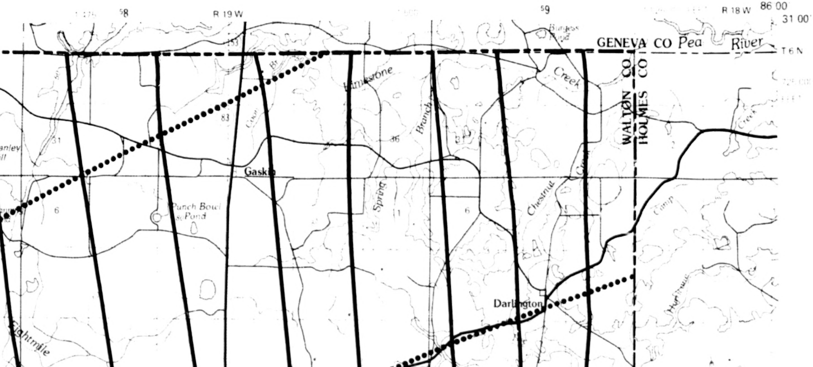

300
53
1 325
R 24 W
54
1 350
R 23 W
30
1 375
55
CONECUH
NATIONAL
FOREST
137
ALABAMA
FLORIDA
Middle Cr
Creek
Hollow
Boggy
B R S F
Bull
Branch
180
36
31
T 6 N
T 5 N
6
Sand Hill Lookout
Creek
BLACKWATER RIVER STATE FOREST
Dry
Ford
Branch
Good Hope
Big
Little Horse Creek
189
Escambia Farms
Horse
B R F
31
6
River
Creek
36
31
Mill
Creek
Campbell
Big
6
AND
Mill
Creek


R 22 W
1 400
56
R 21 W
1 425
57
1 450
15'
R 20 W
COVINGTON CO
OKALOOSA CO
WALTON CO
Florala
Lake Jackson
331
Lakewood
Paxton
Watson Bay
NASHVILLE
Clear Springs
85
36
31
Pleasant Grove
Svea
T 6 N
T 5 N
180
Landing Strip
Laurel Hill
285
Creek
Flowersville
Natural Bridge
Creek
Horsehead
Green
Bay
Br
Branch
Gordon Pond
Branch
210'

MAP

C

HY



58
R 19 W
59
R 18 W
86 00
31 00'
T 6 N
Burgess Pond
GENEVA CO
Pea River
Creek
WALTON CO
HOLMES CO
Limestone
Branch
Creek
31
36
31
83
Gaskin
Punch Bowl Pond
Spring
Chestnut
Creek
6
1
6
Darlington
Eightmile

MICROCOPY RESOLUTION TEST CHART
NBS 1010a
(ANSI and ISO TEST CHART No 2)
1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
28
32
36
40
45

JG 14 '86

I49.89: 82/47-1/map E3

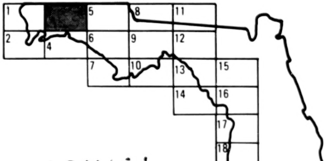
MMS 85-0011
FWS/OBS-82/47.1

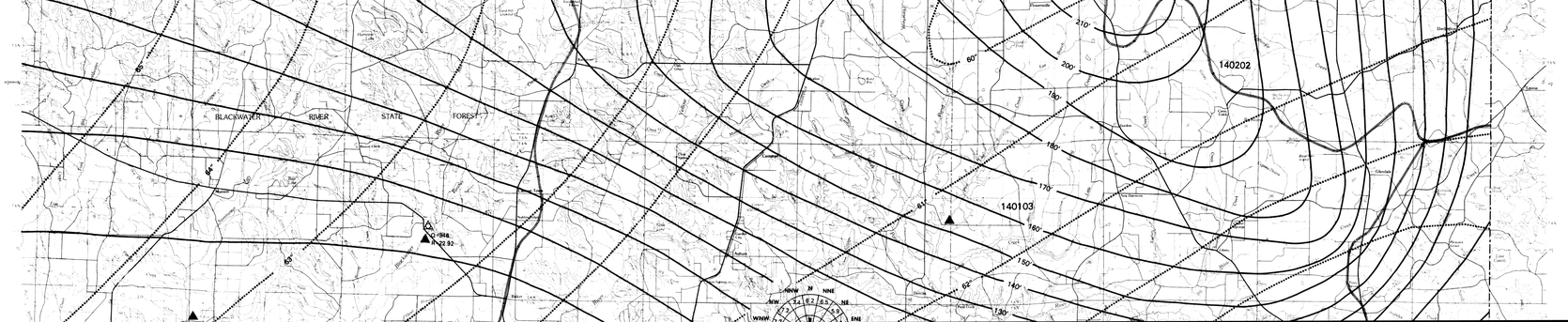
P E3

restview

FLORIDA ECOLOGICAL ATLAS

DROLOGY AND CLIMATOLOGY


1
2
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18



ORIGINAL

Scale 1:100 000

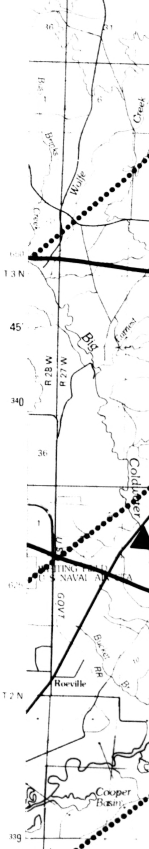
TOPICAL MAPS IN THIS ATLAS:
- A. BIOLOGICAL RESOURCES
- B. SOCIOECONOMIC FEATURES
- C. SOILS AND LANDFORMS
- D. OIL, GAS AND MINERALS
- E. HYDROLOGY AND CLIMATOLOGY

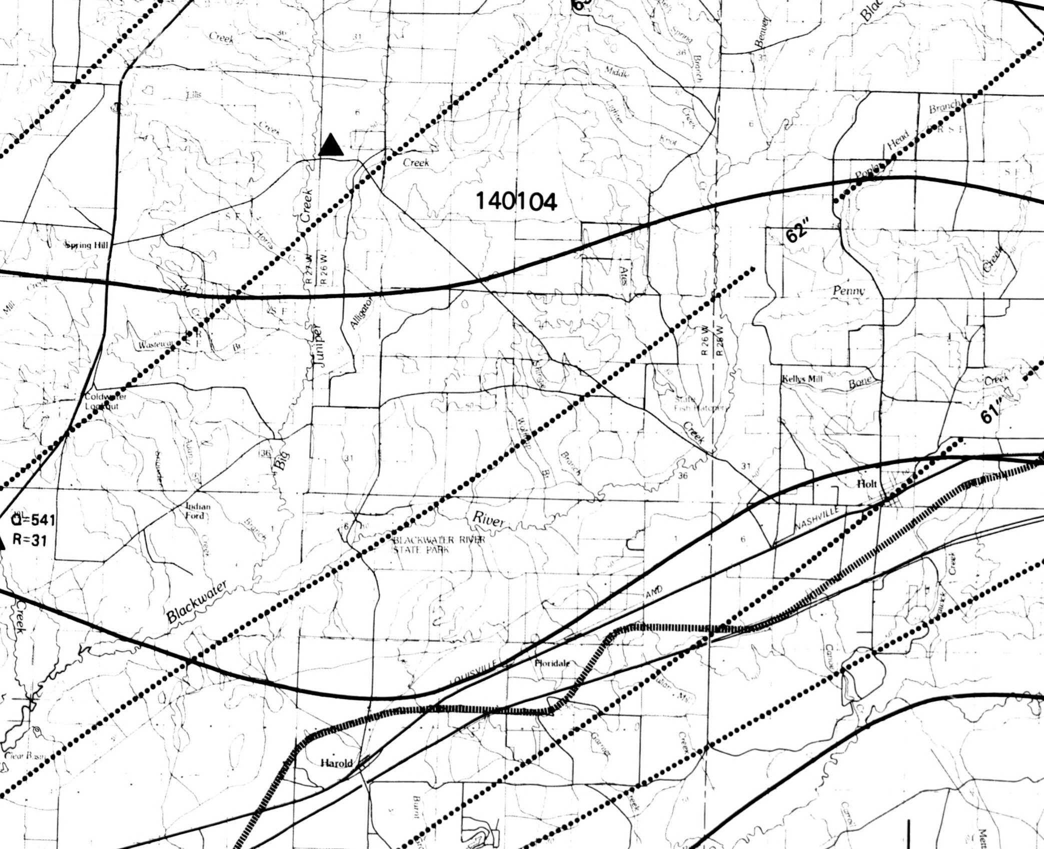
1984

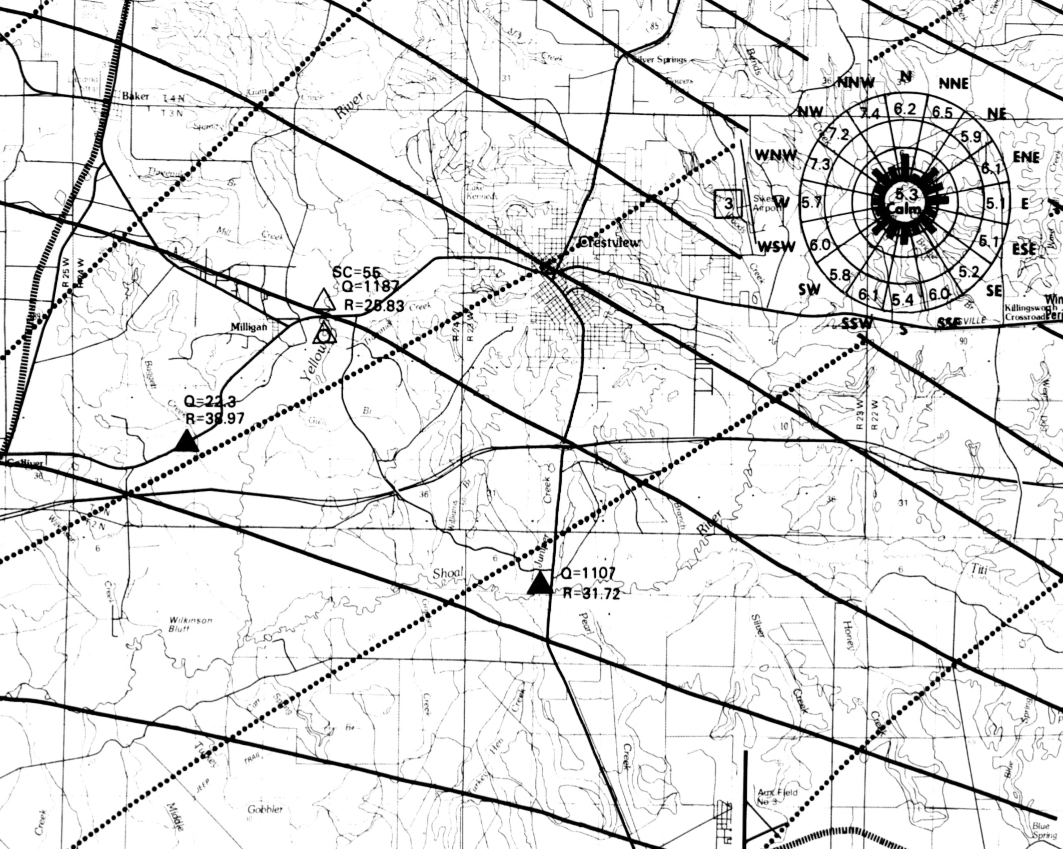
Produced by U.S. Fish and Wildlife Service and Minerals Management Service

Projection and 10,000 meter grid, zone 17: Universal Transverse Mercator
20,000-foot grid ticks based on Florida coordinate system, west zone

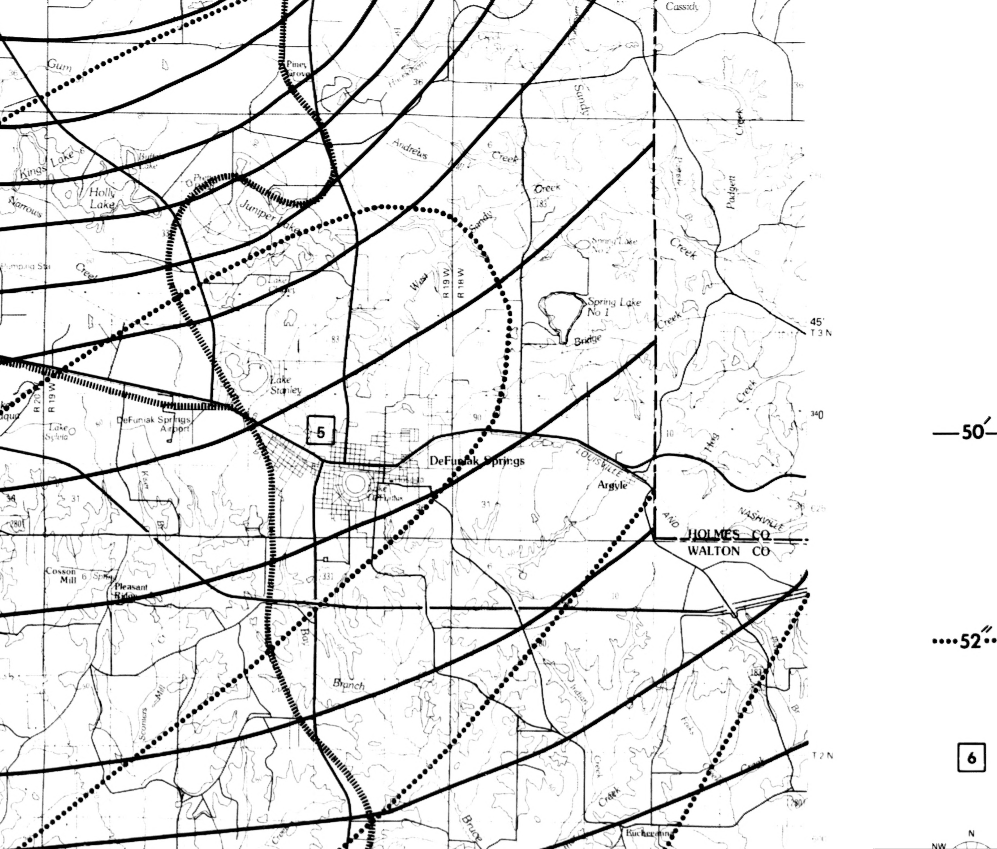
Quality material compiled in 1983 from


36
31
Creek
Wolfe
T 3 N
45'
Big
R 28 W
R 27 W
340
36
Coldwater
1
U S NAVAL
GOVT
RR
Roeville
T 2 N
Cooper
Basin
339


140104
62"
61"
Q=541
R=31
Spring Hill
Coldwater Lookout
Indian Ford
Wastewater
Kellys Mill
Penny
Holt
Floridale
Harold
Clear Basin
State Fish Hatchery
BLACKWATER RIVER STATE PARK
Blackwater
River
Big
Juniper
Creek
Alligator
Ates
Bone
Creek
Ellis
Creek
Horns
Middle
Creek
Lighter
Knot
Spring
Branch
Beaver
Branch
Head
Poplar
Wolfpen
Br.
Branch
Canoe
Creek
Garner
Burnt
Coon
Julian Mill
LOUISVILLE
AND
NASHVILLE
R 27 W
R 26 W
R 26 W
R 25 W
R S F
S F
31
36
6
1
50


Silver Springs
Baker
T 4 N
T 3 N
Gum Creek
River
Lake Kennedy
Crestview
3
Sikes Airport
NNW
N
NNE
NW
NE
WNW
ENE
W
E
WSW
ESE
SW
SE
SSW
S
SSE
7.4
6.2
6.5
7.2
5.9
7.3
6.1
5.7
5.3
Calm
5.1
6.0
5.1
5.8
5.2
6.1
5.4
6.0
Killingsworth Crossroad
R 25 W
R 24 W
R 23 W
R 22 W
SC=55
Q=1187
R=25.83
Milligan
Yellow
Mill Creek
Q=22.3
R=38.97
Galliver
Wilkinson Bluff
Shoal
Juniper Creek
Q=1107
R=31.72
Pearl Creek
Silver Creek
Honey Creek
River
Titi
Aux Field No 3
Gobbler
Blue Spring

150′
140′
130′
120′
110′
100′
90′
80′
70′
60′
62″
63″
64″
Dorcas
Pond Creek
T 4 N
T 3 N
T 2 N
River
Mossy Head
Alpine Heights
nd Rose Station
iod of Record 1948-1954
NASHVILLE
RAILROAD
Forest Highlands
Creek
Alaqua
Alaqua Lookout
Ionia
Landing Strip
U.S. GOVERNMENT
Aux Field No 1
22 W
21 W
R 22 W
R 21 W
Lookout
Sandy
Middle
Big
Long
Sheet
Branch
Hog
East Dog Creek
Steep Head
Bear
Br
285
31
36
1
6


Cassidy
Gum
Piney Grove
Kings Lake
Butler Lake
Holly Lake
Narrows
Juniper Lake
Andrews
Creek
Sandy
Spring Lake No 2
Spring Lake No 1
Bridge
West
Sandy
R 19 W
R 18 W
R 20 W
R 19 W
Lake Stanley
DeFuniak Springs Airport
Lake Sylvia
5
DeFuniak Springs
Lake DeFuniak
Argyle
LOUISVILLE AND NASHVILLE
HOLMES CO
WALTON CO
Padgett
Creek
Hog
Creek
45′
T 3 N
340
T 2 N
Cosson Mill
Pleasant Ridge
Bay
Branch
Sconiers
Mill
Indian
Fox
Creek
Bruce
Buchenau
—50′—
••••52″••
6
N
NW

Produced by U.S. Fish and Wildlife
Service and Minerals Management Service

Projection and 10,000 meter grid, zone 17: Universal Transverse Mercator
25,000-foot grid ticks based on Florida coordinate system, west zone

Overlay material compiled in 1983 from latest available data obtained from Federal, State and Local government agencies and other sources.

— **POTENTIOMETRIC CONTOURS OF THE FLORIDAN AQUIFER**

The map represents dry season water levels present in tightly cased wells penetrating the Floridan Aquifer during May of 1980. The contour interval is 5 and 10 feet. Contour lines have been generalized to allow for non-simultaneous water level measurement and variable well depth.
Groundwater flow is down-gradient from potentiometric highs and perpendicular to potentiometric contour lines.
(Measured in feet above mean sea level)

•• **MEAN ANNUAL ISOHYETAL (RAINFALL) CONTOURS**

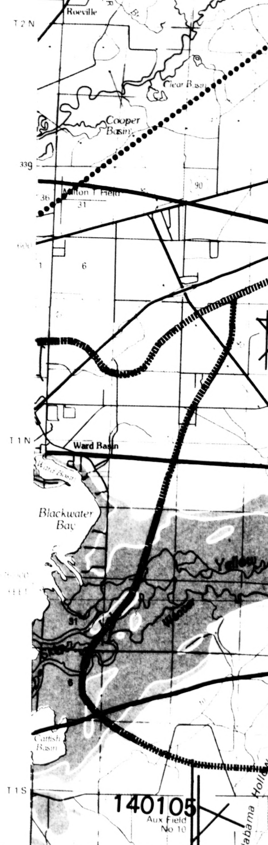
(1951-1980 National Weather Service Normal Base Period)
The contour interval is 1.0" (refer to narrative for monthly isohyetal maps and for trend evaluation).

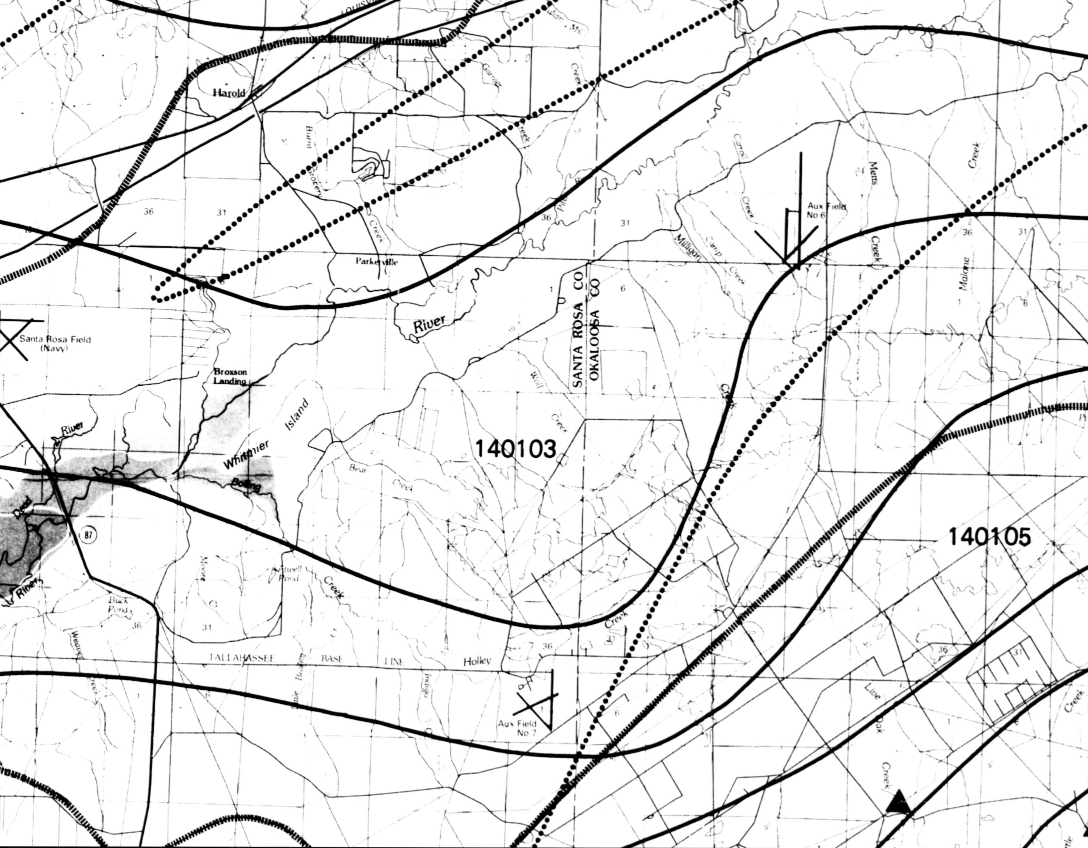
NATIONAL WEATHER SERVICE 30-YEAR CLIMATOLOGICAL STATION

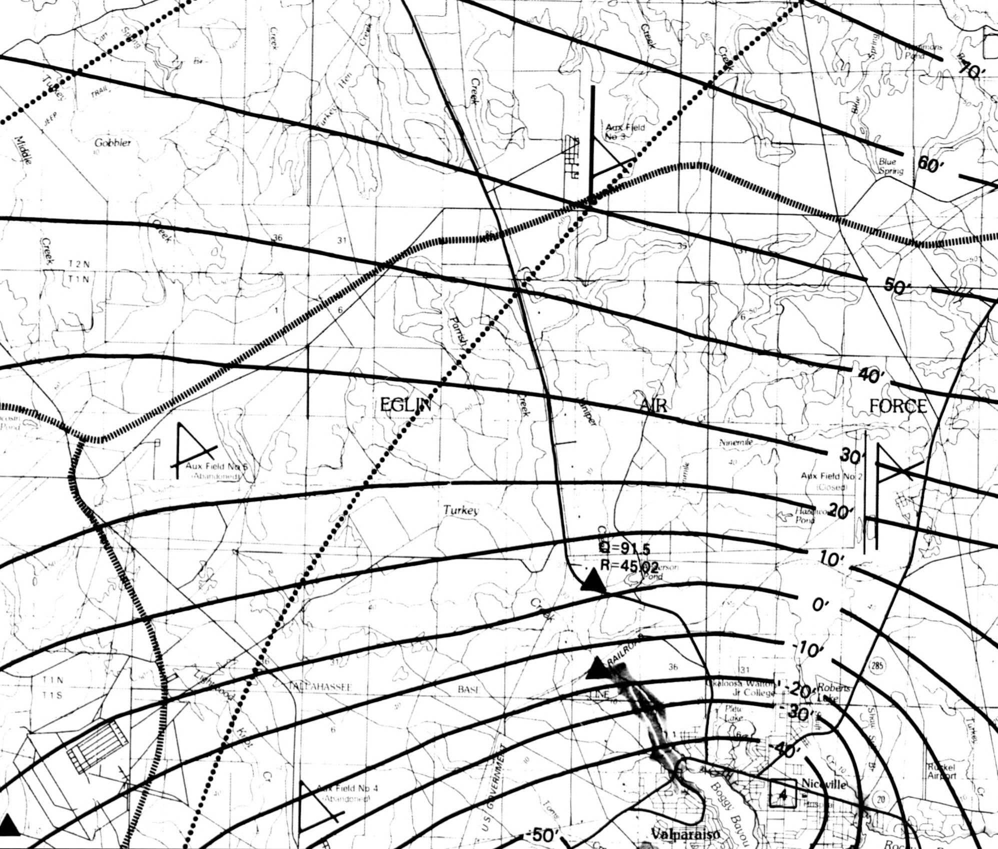
(Number in the box on map refers to station name in supplemental legend'

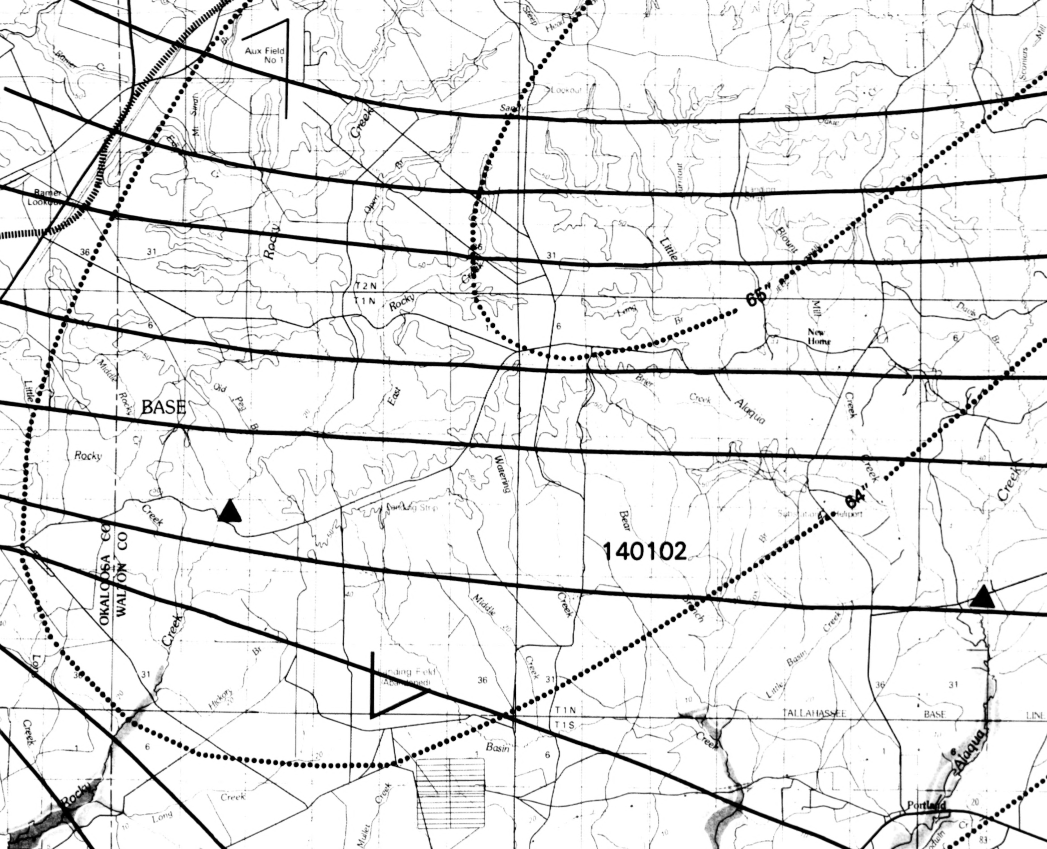
WIND ROSE STATION

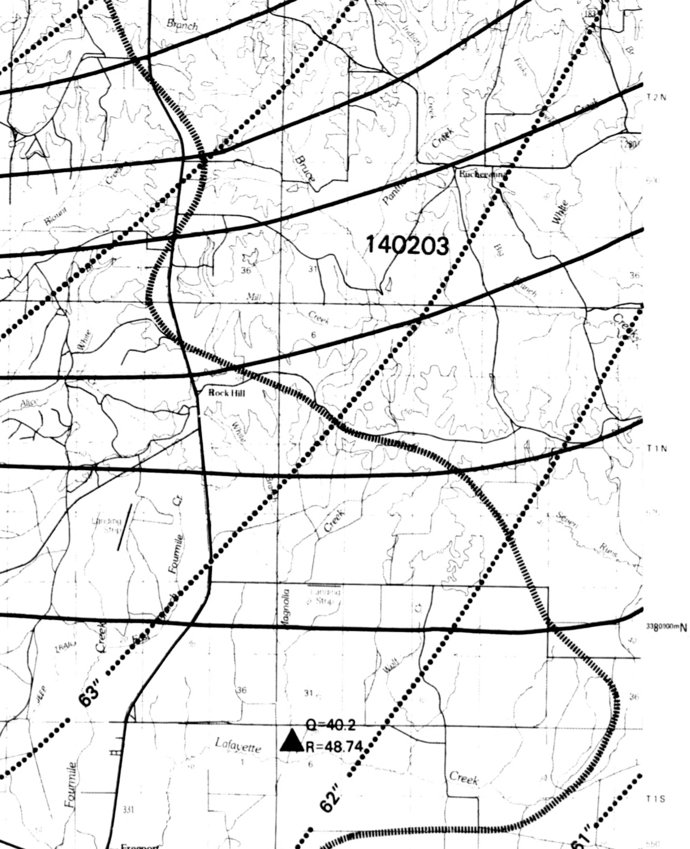
Concentric circles represent 5%
NE frequency interval. The average wind


Roeville
T2N
Clear Basin
Cooper Basin
339
Milton T Field
36
31
90
1
6
T1N
Ward Basin
Blackwater Bay
Yellow
31
Catfish Basin
T1S
140105
Aux Field No 10
Alabama Hollo


Louisville
Julian Mill
Harold
Garner
Creek
Burnt
Grocery
Creek
Creek
Creek
Pine
36
31
36
31
Parkerville
Carroll
Creek
Metts
Creek
Aux Field
No 6
Milligan
Camp
Creek
Creek
36
31
Malone
1
6
1
6
River
Santa Rosa Field
(Navy)
Broxson
Landing
SANTA ROSA CO
OKALOOSA CO
Wolf
Creek
River
Whitmier
Island
Boiling
140103
Bear
Creek
Dead
River
87
140105
Moore
Pond
Creek
Buck
Pond
36
31
Weaver
Creek
Creek
36
36
31
TALLAHASSEE
BASE
LINE
Holley
Little Boiling
Indigo
1
6
1
6
Aux Field
No 7
Live
Oak
Creek
Creek
1
6

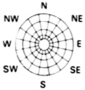

70'
60'
50'
40'
30'
20'
10'
0'
-10'
-20'
-30'
-40'
-50'
Q=91.5
R=45.02
EGLIN
AIR
FORCE
Aux Field No 3
Aux Field No 5
(Abandoned)
Aux Field No 2
(Closed)
Aux Field No 4
(Abandoned)
Gobbler
Middle
Turkey
JEEP
TRAIL
Creek
Hen
Blue Spring
Parrish
Juniper
Ninemile
Turkey
Hazelton Pond
TALLAHASSEE
BASE
LINE
RAILROAD
US GOVERNMENT
Okaloosa Walton Jr College
Roberts Lake
Plew Lake
Niceville
Valparaiso
Boggy Bayou
Ruckel Airport
T2N
T1N
T1S
285
20
4


140102
65"
64"
BASE
OKALOOSA CO
WALTON CO
Aux Field No 1
Ramer Lookout
Lookout
T2N
T1N
T1N
T1S
TALLAHASSEE BASE LINE
New Home
Landing Strip
Substation Helipad
Landing Field (Abandoned)
Portland
Rocky Creek
Little Rocky Creek
Middle Rocky Cr
East Rocky Cr
Open Br
Mt. Sarah
Old Peg Br
Long Br
Brier Creek
Alaqua
Alaqua Creek
Blount Mill
Mill Creek
Davis Br
Bear Branch
Little Basin Creek
Basin Creek
Middle Creek
Watering Creek
Hickory Br
Long Creek
Mullet Creek
Sconiers Mill
Steep Head
Sandy
Burnout
Little
Okie
36
31
6
1
50
40
20
10
83

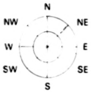

Branch
Indian
Fox
Creek
Bruce
Panther
Buchanan
Blount
Creek
140203
Big Branch
White
Mill
Creek
White
Creek
Rock Hill
Alice
White
Landing Strip
Fourmile
Cr.
Branch
Creek
Seven Runs
Magnolia
Landing Strip
Wolf
Creek
63"
62"
61"
Q=40.2
R=48.74
Lafayette
Creek
Fourmile
Freeport
183
T 2 N
T 1 N
3380000mN
T 1 S

(1951-1980 National Weather Service Normal Base Period)
The contour interval is 1.0" (refer to narrative for monthly isohyetal maps and for trend evaluation).

6 **NATIONAL WEATHER SERVICE 30-YEAR CLIMATOLOGICAL STATION**
(Number in the box on map refers to station name in supplemental legend'


N
NE
E
SE
S
SW
W
NW

WIND ROSE STATION
Concentric circles represent 5% frequency interval. The average wind speed (mph) is listed in the outer quadrant of each vector direction (Wind rose data represents wind data that has been summarized by the National Climatic Center for Airports, Naval Air Stations and NWS Offices)


N
NE
E
SE
S
SW
W
NW

OFFSHORE SURFACE CURRENT ROSE
Resultant vectors for each season are shown. The magnitude of each vector is proportional to the velocity. (Concentric circles represent 3 centimeters/second currents)
Vectors defined by the New England Coastal Engineers Computer Model G.A.L.

S	Spring
Su	Summer
FW	Fall/Winter

HURRICANE INUNDATION ZONES
(Maximum areas subject to flooding by Storm Category, as defined by National Weather Service Computer Models)

▨ Category #1 Storm (74-95 mph winds; probability of occurence 1:10 years)

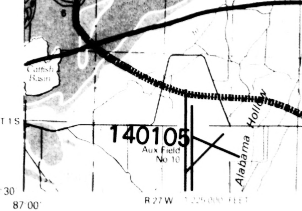
▨ Category #2 Storm (96-110 mph winds; probability of occurence 1:27 years)

☐ Category #3 Storm (111-130 mph winds; probability of occurence 1:42 years)

☐ Category #4 Storm (131-155 mph winds; probability of occurence no historical record)

☐ Category #5 Storm (> 155 mph winds; probability of occurence no historical record)

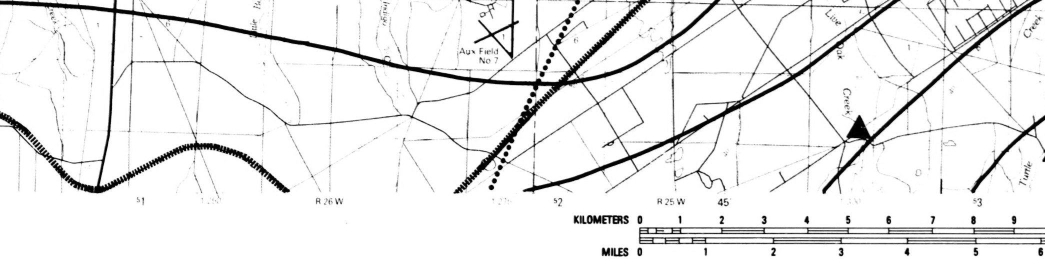
(Hurricane inundation zones on this map represent generalized areas of maximum areal storm surge flooding by storm category. The scale and detail of this map are meant for planning purposes only. This map is unsuitable for determining the vulnerability of individual buildings to storm surge)


Catfish Basin
T1S
140105
Aux Field No 10
Alabama
Holl
30 30
87 00
R 27 W
1 225 000 FEET

THE FLORIDA ECOLOGICAL ATLAS WAS PRODUCED BY THE
SERVICE, DIVISION OF BIOLOGICAL SERVICES, NATIONAL CO
TEAM (FWS OBS 82 47) AND THE MINERALS MANAGEMEN
PLANNERS, DECISION MAKERS, AND THE GENERAL PUBLIC,
EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG L
WILDLIFE REQUIREMENTS, AND THE MAINTENANCE OF ECOL
THE STUDY AREA INCLUDES THE COASTAL COUNTIES ESCA
OKALOOSA, WALTON, WASHINGTON, BAY, CALHOUN, GULF,
JEFFERSON, TAYLOR, DIXIE, LEVY, CITRUS AND HERNANDO,
OFFSHORE APPROXIMATELY 10 MILES. THERE IS NO ATTEM
OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PR
JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL GOVERN
THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAM
AGENCIES

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURC
INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE M
CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND
FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS F
MEASUREMENTS OF DISTANCES OR AREAS

MICROCOPY RESOLUTION TEST CHART
NBS 1010a
ANSI and ISO TEST CHART No. 2
1.0
1.1
1.25
2.8
3.2
3.6
4.0
4.5
2.5
2.2


Creek
Aux Field
No 7
Live
Oak
Creek
Creek
Turtle
51
R 26 W
52
R 25 W
45'
53
KILOMETERS 0 1 2 3 4 5 6 7 8 9
MILES 0 1 2 3 4 5 6

U.S. FISH AND WILDLIFE
OASTAL ECOSYSTEMS
NT SERVICE FOR COASTAL
TO DETERMINE AND
LAND USES, FISH AND
LOGICAL DIVERSITY
MBIA, SANTA ROSA,
, FRANKLIN, WAKULLA,
AND EXTENDS
PT. IN THE DESIGN
ROPRIETARY
MENT TO ESTABLISH
MS OF GOVERNMENT

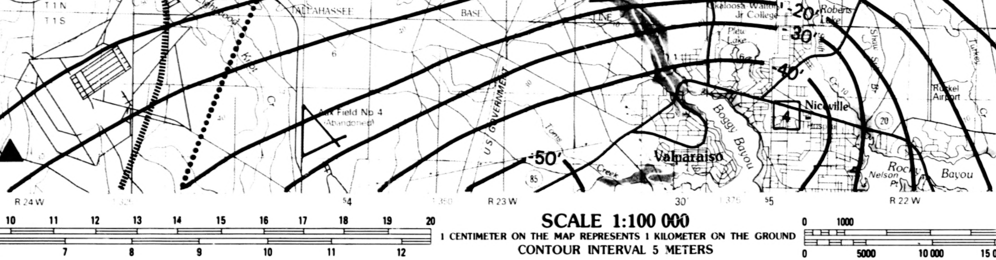
CE MATERIALS
MANY SOURCES
OTHER MAPPED
FOR PRECISE

PRIMARY SOURCES OF MAPPED INFORMATION:

HYDROLOGY: Potentiometric Surface of the Floridan Aquifer, Northwest Florida Water Management District, Tallahassee, Florida, 1980.
Potentiometric Surface of the Floridan Aquifer, Suwanee River Water Management District, Live Oak, Florida, 1980.
Potentiometric Surface of the Floridan Aquifer, Southwest Florida Water Management District, Brooksville, Florida, 1981.
Sea, Lake, and Overland Surges from Hurricanes (SLOSH) Model, National Oceanic and Atmospheric Administration, Silver Spring, Maryland, 1981.
Water Resources Data for Florida, U.S. Geological Survey, Tallahassee, Florida, 1979, 1980.
Water Quality Inventory for the State of Florida, Dept. of Environmental Regulation, Tallahassee, Florida, 1982.
Current Atlas of the West Florida Shelf, New England Coastal Engineers, Bangor, Maine. 1982.

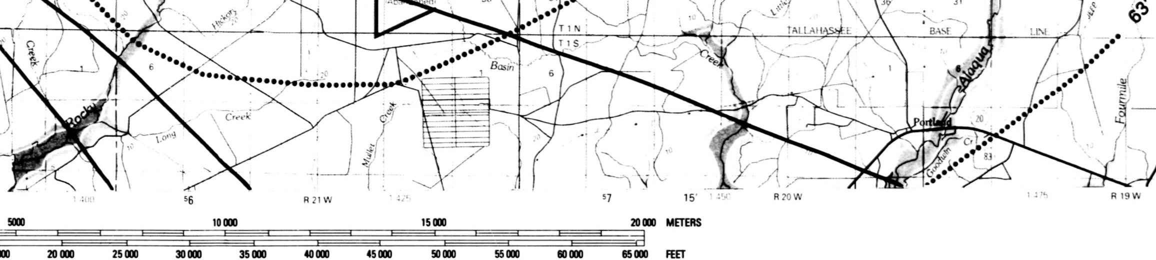
CLIMATOLOGY: National Climatic Center, Asheville, North Carolina. 1981.

FOR COMPLETE REFERENCES SEE MAP NARRATIVE


T1N
T1S
TALLAHASSEE
BASE
Okaloosa-Walton Jr College
-20'
-30'
-40'
-50'
Roberts Lake
Pleu Lake
Aux Field No 4 (Abandoned)
U S GOVERNMENT
Niceville
4
Boggy Bayou
Valparaiso
Ruckel Airport
20
85
Rocky Bayou
Nelson Pt
R 24 W
R 23 W
R 22 W
SCALE 1:100 000
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND
CONTOUR INTERVAL 5 METERS
0
1000
5000
10 000

CLIMATOLOGICAL STATION NAMES

1. Pensacola FAA Airport
2. Milton Experimental Station
3. Crestview FAA Airport
4. De Funiak Springs
5. Niceville
6. Chipley 3 E
7. Panama City NE
8. Blountstown
9. Apalachicola Airport
10. St. Marks 5 SSE
11. Monticello 3 W
12. Cross City 2 WNW
13. Inverness
14. Brooksville Chinsegut Hill


Creek
Rocky
Hickory
Long
Creek
Mullet
Creek
Basin
T1N
T1S
TALLAHASSEE
BASE
LINE
Little
Creek
Alaqua
Portland
Goodwin
Cr
Fourmile
63
R 21 W
R 20 W
R 19 W
56
57
15'
5000
10 000
15 000
20 000
METERS
20 000
25 000
30 000
35 000
40 000
45 000
50 000
55 000
60 000
65 000
FEET

U.S. GEOLOGICAL SURVEY HYDROLOGIC UNIT BOUNDARIES (Cont'd)

Coastal Area between Ochlockonee and Apalachicola Rivers (130013)
Ochlockonee River Basin (120003)
St. Marks and Wakulla Rivers and Coastal Area between Aucilla and Ochlockonee Rivers (120001)
Aucilla River Basin (110103)
Coastal Area between Suwannee and Aucilla Rivers (110102)
Suwannee River Basin below Withlacoochee River excluding Santa Fe River Basin (110205)
Waccasassa River and Coastal Area between Withlacoochee and Suwannee Rivers (110101)
Oklawaha River Basin (080102)
Withlacoochee River Basin (100208)
Coastal Area from Tampa Bay to Withlacoochee River (100207)

▲ Q = ___ cfs
R = ___ in/yr

U.S. GEOLOGICAL SURVEY STREAM GAGING STATION

Mean Annual Discharge (cubic feet/second) = Q
Mean Annual Runoff (inches/year) = R

△ SC = ___ mmhos
Q = ___ cfs
R = ___ in/yr

U.S. GEOLOGICAL SURVEY STREAM GAGE AND SURFACE WATER QUALITY STATION

Mean Annual Surface Water Specific Conductivity (micromhos) = SC
Mean Annual Discharge (cubic feet/second) = Q
Mean Annual Runoff (inches/year) = R

△

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION FIXED SURFACE WATER STATION

(Insufficient period of record to establish a long term mean)

○ SC = ___ mmhos
Cl = ___ mg/l

U.S. GEOLOGICAL SURVEY GROUND WATER OBSERVATION AND WATER QUALITY WELL

Mean Annual Ground Water Specific Conductivity (micromhos) = SC
Dissolved Chloride (milligrams/liter) = Cl

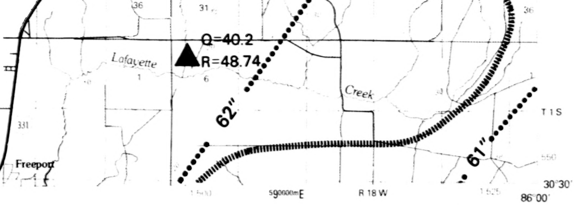
S = ___ ppt

MEAN ANNUAL COASTAL SALINITY

(parts per thousand) = S

STUDY AREA BOUNDARY

▮▮▮▮▮▮▮▮▮▮ Offshore
— — — Inland (County)
— - - — Inland (State)

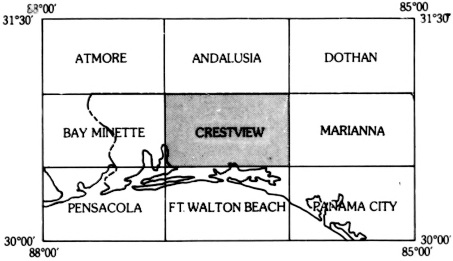

36
31
Q=40.2
R=48.74
Lafayette
1
6
Creek
62"
331
Freeport
36
T 1 S
61"
550
30°30'
590000mE
R 18 W
86°00'

☐ Category #5 Storm (> 155 mph winds; probability of occurence no historical record)

(Hurricane inundation zones on this map represent generalized areas of maximum areal storm surge flooding by storm category. The scale and detail of this map are meant for planning purposes only. This map is unsuitable for determining the vulnerability of individual buildings to storm surge)

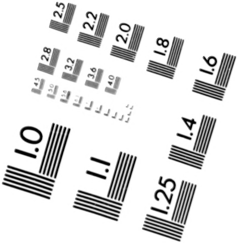
▥ **U.S. GEOLOGICAL SURVEY HYDROLOGIC UNIT BOUNDARIES**

Perdido River Basin (14106)
Perdido Bay, Inflow and Coastal Area (140107)
Lower Conecuh River Basin (140304)
Escambia River Basin (140305)
Blackwater River Basin (140104)
Escambia Bay, Inflow and Coastal Area (140105)
Yellow River Basin (140103)
Choctawhatchee Bay, Inflow and Coastal Area (140102)
Pea River Basin (140202)
Choctawatchee River below Pea River (140203)
St. Andrews Bay, Inflow and Coastal Area (140101)
Chipola River Basin (130012)
Apalachicola River Basin (130011)
Apalachicola Bay Coastal Area and Offshore Islands (130014)


88°00'
85°00
31°30'
31°30'
ATMORE
ANDALUSIA
DOTHAN
BAY MINETTE
CRESTVIEW
MARIANNA
PENSACOLA
FT. WALTON BEACH
PANAMA CITY
30°00'
88°00'
30°00'
85°00'

MICROFILMED FROM
EST AVAILABLE COPY

MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0